POTAPKOV, N.A.

Resonance in uniaxial ferromagnetics. Fiz.tver.tela 4 no.7:
1803-1806 Jl '62. (MIRA 16:6)
(Ferromagnetic resonance)

L 14359-63 EWT(1)/EWP(q)/EWT(m)/BDS/ES(s)-2 AFFTC/ASD/SSD Pt-4
JD/HW-2
ACCESSION NR: AP3003647 S/0020/63/151/003/0543/0545

AUTHOR: Potapkov, N. A. 16 66

TITLE: Magnetic anisotropy of uniaxial ferromagnetic substances 21

SOURCE: AN SSSR. Doklady*, v. 151, no. 3, 1963, 543-545

TOPIC TAGS: ferromagnetism, magnetic anisotropy, cobalt

ABSTRACT: The dependence of the magnetic anisotropy on the spin-orbital and spin-spin interactions of the electrons of the unfilled d-shells is investigated. For this purpose, the Hamiltonian for a uniaxial ferromagnetic crystal obtained by the author (DAN SSSR 144, 1962, 297) is used. The computation is conducted for the special case of cobalt. The direction of the magnetization vector is found from the condition for the minimum of free energy. "In conclusion, the author takes the opportunity to express his appreciation to S. V. Tyablikov for the discussion of the work." Orig. art. has: 31 equations.

ASSOCIATION: Matematicheskiy institut im. V. A. Steklova Akademii nauk SSSR (Institute of Mathematics, Academy of Sciences, SSSR)

Card 1/2

POTAPKOV, N.A.

Hamiltonian of a uniaxial ferromagnetic. Dokl.AN SSSR 144 no.2:297-299 My '62. (MIRA 15:5)

1. Magnitnaya laboratoriya AN SSSR. Predstavleno akademikom N.N.Bogolyubovym.

(Ferromagnetism)

L 32070-66 EWT(m)/EWP(j) RM

ACC NR: AR6016174 SOURCE CODE: UR/0058/65/000/011/D013/D013

AUTHOR: Potapochkina, L. M.; Terpugova, A. F.; Zubkova, L. B.

TITLE: Investigation of singlet and triplet levels of anthraquinone and its derivatives

SOURCE: Ref. zh. Fizika, Abs. 11D88

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 336-344

TOPIC TAGS: molecular orbital, molecular spectrum, nonmetallic organic derivative, luminescence quenching, hydrogen bonding, oxygen

ABSTRACT: Two methods (MO LCAO and MOSE) are used to calculate the energy spectrum and the wave functions of anthraquinone and some of its α- and β-derivatives. The α-derivatives of anthraquinone were calculated with and without allowance of the intramolecular H bond. Data are obtained on the influence of the structure and composition of the molecule, and also on the effect of the electron-donor properties of the substitute on the position of the singlet and triplet levels, making it possible to explain the experimental results of A. V. Karyakin, who investigated the fluorescence quenching of these compounds by oxygen [Translation of abstract]

SUB CODE: 20, 07

Card 1/1

OLEKSENKO, V.P., BARKALOV, I.A., POTAPOCHKIN, V.M.

History of valleys in the western part of the Sary-Su--Tengiz watershed. Izv. AN Kazakh. SSR. Ser. geol. no.1:34-47 '60.
(Kazakhstan--Valleys)

SNEGOVSKIY, F. P., kand. tekhn. nauk; POTAPKINA, N. P., inzh.
SVISTUNOVA, V. P., inzh.

New materials used in friction units of machinery. Vest. mashinostr. 42 no.12:36-37 D '62. (MIRA 16:1)

(Machinery—Construction)

KOCHETOV, V., brigadir; POTAPOV, A.; BEREGOVOY; SEDOV, A.

Operations of a mining brigade at the Moscow Basin mine no. 66.
Ugol' 32 no.5:2 My '57. (MLRA 10:5)

1. Kombaynovaya prokhodcheskaya brigada (for Kochetov). 2.
Nachal'nik shakhty No. 66 v Podmoskovnom basseyne (for Potapov).
3. Partiyniy organizator (for Beregovoy). 4. Predsedatel'
Shakhtkoma (for Sedov).
(Moscow Basin--Coal mines and mining)

POGUDIN, G. (g.Chusovoy); DOGADIN, S. (g.Kol'chugino, Vladimirskoy obl.); POTAPOV, A. (Chukotka, pos.Komsomol'skiy)

Readers' letters. Izobr. i rats. no.6:34-35 Je '61. (MIRA 14:6)

(Technological innovations)

ZANIN, V., podpolkovnik; CHERKASOV, M., leytenant; KLINOV, V., starshiy leytenant; DITS, G., mayor; LEBEDEV, I., mayor; FEDOROV, N., mayor; POTAPOV, A., gvardii starshina; BORISENKO, P., gvardii polkovnik.

Markings for cross-country routes and passages through obstructions; suggestions from engineering units. Voen.-inzh. zhur. 101 no.4:28-33 Ap '57. (MLRA 10:6)
(Obstacles (Military science))

POTAPOV, A., insh. (Ivanovo)

Kerosene stoves with removable tanks. Pozh.delo 6 no.5:10 My '60. (MIRA 13:8)
(Stoves, Oil)

POTAPOV, A., ryadovoy

Test of str[illegible]th. Komm. Vooruzh. Sil 5 no.[illegible] [illegible]64.
(MIRA 17:11)

S/184/61/000/005/007/009
D041/D113

AUTHORS: Potapov, A.A.; Krasnokutskiy, P.M., Engineers.

TITLE: Transversal screw rolling used for ribbing the steel pipes of heat exchanging apparatus.

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 5, 1961, 43-44

TEXT: The authors recommend transversal screw rolling for ribbing the pipes of heat exchangers as the most practicable method to be used by any machine-building plant. The Stalingradskiy zavod im. Petrova (Stalingrad Plant im. Petrov) has manufactured the ППК-200Н (PPK-200N) heater using the above-mentioned method. It has a pipe set consisting of 208 steel pipes with 25 x 3 mm. dimensions. The eccentric arrangement of the pipe set permitted the pipes to be installed in a casing 1,200 mm in diameter instead of 1,600 mm as per norm. The use of transversal screw rolling resulted in a 65% increase in the heat exchanging surface as well as in an economy of pipes, since the latter were lengthened during the process by 200-250 mm (tubes of 6,000 mm). Consequently, shorter pipes should be used.

Card 1/3

CA

12

Physiological and ecological problems of aquatic hydrophytes. A. A. Potapov. *Uspekhi Sovremennoi Biol.* (Advances in Modern Biol.) 29, 425-41(1950). - Sources of CO_2 for photosynthesis, plant anatomy as related to gas permeability, and mineral content are reviewed for several species of *Potamogeton*, *Myriophyllum*, *Ceratophyllum*, and *Elodea*. 55 references. Julian F. Smith

POTAPOV, A. A.

Lakes

Role of chemism of bottom sediments in the propagation and change of types of aquatic plants in the forest-zone lakes. Trudy Lab. sapr. otl., No. 5, 1951.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

POTAPOV, A.A.

Submerged hydrophytic overgrowth of reservoirs. Trudy Gidrobiol. ob-va no.6:205-210 '55. (MLRA 8:9)

1. Institut malyarii, meditsinskoy parazitologii i gel'minotologii Ministerstva zdravookhraneniya SSSR
(Aquatic plants) (Reservoirs)

POTAPOV, A.A.

Initial states of vegetation overgrowth in the upper reaches of the Tsimlyansk Reservoir. Med.paraz. i paraz. bol.24 no.3: 232-237 Jl-S '55. (MLRA 8:12)

1. Iz entomologicheskogo sektora Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir. instituta-prof. P.G.Sergiyev, zav.sektorom-prof. V.N.Beklemishev)
(WATER SUPPLY,
plants in water conservation lakes)

POTAPOV, A.A.

Photosynthesis of subversed plants in connection with the overgrowing of the upper reaches of TSimlyanks Reservoir. Trudy Gidrobiol.ob-va 7:52-66 '56. (MLRA 10:2)

1. Institut malyarii, Meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR.
(TSimlyansk Reservoir--Aquatic plants) (Photosynthesis)

POTAPOV, A.A.

Anophelogenic significance of wild rice in water sheds. Med.paraz. i paraz. bol. 26 no.3:340-343 My-Je '57. (MIRA 10:11)

1. Iz Instituta malyarii, meditsinskoy parazitologii i gel'mintologii Ministerstva zdravookhraneniya SSSR (dir. - prof. P.G.Sergiyev).
(MOSQUITOES,
breeding in wild rice fields (Rus))

POTAPOV, A.A.

Reservoir overgrowing under different water level conditions.
Bot.zhur. 44 no.9:1271-1278 S '59. (MIRA 13:2)

1. Institut malyarii meditsinskoy parazitologi i gel'mintologii Moskva.
(Reservoirs) (Fresh-water flora)

POTAPOV, A.A.

Significance of botton deposits in forecasting the filling of reservoirs with aquatic vegetation. Trudy Gidrobiol. ob-va 10:43-51 '60. (MIRA 13:9)
(Reservoir sedimentation) (Fresh-water flora)

POTAPOV, A.A., kand.biologicheskikh nauk

Ring-type and barrier growths of aquatic plants. Priroda 49 no. 12:103-104 D '60. (MIRA 13:12)

1. Institut meditsinskoy parazitologii i tropicheskoy meditsiny Ministerstva zdravookhraneniya SSSR, Moskva.
(Aquatic plants)

POTAPOV, A.A.

Overgrowth in shallow areas of the Gorkiy and Kuibyshev reservoirs as a possible breeding-place for mosquitoes, horseflies, and gnats. Med.paraz.i paraz.bol. 29 no.3:341-345 '60. (MIRA 13:12)
(MOSQUITOES) (DIPTERA) (RESERVOIRS)

POTAPOV, A.A.

Method of sanitary-epidemiological prognosis during the construction of large water reservoirs. Med.paraz.i paraz.bol. 29 no.2:197-202 '60. (MIRA 13:12)
(WATER SUPPLY--HYGIENIC ASPECTS)

POTAPOV, A.A.

Distribution of hydrophytes in reservoirs of the Volga-Don Canal and their sanitary and epidemiological evaluation. Trudy Gidrobiol. ob-va 11:354-360 '61. (MIRA 15:1)

1. Institut meditsinskoy parazitologii i tropicheskoy meditsiny, Moskva.

(VOLGA DON CANAL--FRESH-WATER FLORA)

POTAPOV, A.A.; VLADIMIROV, N.N.

Devices for the automatic triggerin of traps and for fractional gadfly count. Med.paraz.i paraz.bol. no.1:109-110 '62.
(MIRA 15:5)

1. Iz entomologicheskogo otdela (zav. - prof. V.N. Beklemishev) Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I. Martsinovskogo (dir. - prof. P.G. Sergiyev) Ministerstva zdravookhraneniya SSSR.
(ENTOMOLOGY--EQUIPMENT AND SUPPLIES) (HORSEFLIES)

POTAPOV, A.A.; MOSOLOV, L.P.

Number and epidemiological significance of water rats in water reservoirs. Biul.MOIP.Otd.biol. 67 no.4:5-15 Jl-Ag '62. (MIRA 15:10)

(WATER VOLES AS CARRIERS OF DISEASE)

POTAPOV, A.A.; VLADIMIROVA, V.V.

Effect of repellents on some species of horsefly at different air temperatures; field trials with Skuf'in traps. Med. paraz. i paraz. bol. 32 no.5:542-546 S-O'63 (MIRA 16:12)

1. Iz otdela entomologii (zav. - prof. V.N.Beklemishev [deceased]) Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I.Martsinovskogo (dir. - prof. P.G.Sergiyev) Ministerstva zdravookhraneniya SSSR.

VLADIMIROVA, V.A.; POTAPOV, A.A.

New models of traps for horseflies and blackflies. Med. paraz. i paraz. bol. 32 no.1:83-88 Ja-F'63. (MIRA 16:10)

1. . Iz entomologicheskogo otdela (zav. - prof. V.N.Beklemishev) [deceased]) Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I.Martsinovskogo Ministerstva zdravookhraneniya SSSR (dir. - prof. P.G.Sergiyev).

POTAPOV, A.A.

Automatic trap (AL-1) for the [illegible] tion of the number of horse flies (Tabanidae) and [illegible] (Simuliidae). Med. paraz. i parazit. bol. 33 no.2:[illegible] Mr-Ap '64 (MIRA 18:5)

1. Entomologicheskiy otdel (zav. - prof. V.I. Pervomayskiy) Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I. Martsinovskogo (direktor - prof. [illegible]) Ministerstva zdravookhraneniya SSSR.

POTAPOV, A.A.; VLADIMIROVA, V.V.

Comparative testing of repellents against horseflies and black flies by olfactometry and with traps. Izv. SO AN SSSR no.8. Ser. biol.-med. nauk no.2:99-104 '65. (MIRA 18:9)

1. Institut meditsinskoy parazitologii i tropicheskoy meditsiny, Moskva.

L 15746-66 EWT(1) RO
ACC NR: AP5024174 SOURCE CODE: UR/0290/65/000/002/0099/0104

AUTHOR: Potapov, A. A.; Vladimirova, V. V. 23 B

ORG: Institute of Medical Parasitology and Tropical Medicine, Moscow (Institut meditsinskoy parazitologii i tropicheskoy meditsiny) 64,55

TITLE: Comparative tests of horsefly and gnat repellents in olfactometers and traps

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya biologo-meditsinskikh nauk, no. 2, 1965, 99-104

TOPIC TAGS: insect control, insecticide, insect repellent, entomology, olfaction

ABSTRACT: Findings derived from more than 60 comparative tests (conducted in the field and in the laboratory) of recently developed compounds against horseflies and gnats are described. Findings in the field, which are to be interpreted with caution because they are profoundly influenced by meteorological conditions, showed that diethyltoluamide, R-2, and benzimine were the most effective repellents of horseflies of the genus *Tabanus*. On the other hand, quezol and R-228 ("patol"), al-

UDC: 632.931.43

Card 1/2

2

L 15746-66

ACC NR: AP5024174

though less effective initially, were much more stable, retaining their activity after the other compounds had lost theirs. Of the two predominant species of *Tabanus*, *T. solstitialis* was more susceptible to all the chemicals tested than *T. tropicus*. Laboratory tests with the olfactometer showed that R-325, benzimine, R-162 (N-benzoylpiperidine) and R-31 were the most effective repellents of gnats. Those found to be the most stable were benzimine, R-216, R-326, and R-163 (phenacetylpiperidine). *Simulium galeratum* was found to be considerably less sensitive to all chemicals than *Gnus cholodkovkii* the other most common gnat. With the application of small doses (at high temperatures and low humidity) certain compounds exerted a powerful attraction on horseflies (R-243, 280, 63 crude diethyltoluamide and R-2) and on gnats (R-254, 280, 154, 243 and 257). Orig. art. has: 1 figure, 1 table.

SUB CODE: 06/ SUBM DATE: 26Jan65/ ORIG REF: 007/ OTH REF: 000

Card 2/2 mc

POTAPOV, A.A.

Reply to the critical remarks made by B.S. Grabovskii and V.B. Kazhdan concerting the article "On the method of testing new repellents. Med. paraz. i paraz. bol. 34 no. 5:606-607 S-O '65 (MIRA 19:1)

1. Submitted July 2, 1965.

ACC NR: AP6029588 (A, N) SOURCE CODE: UR/0359/66/035/001/0069/0073

AUTHOR: Potapov, A. A.

ORG: Institute of Medical Parasitology and Tropical Medicine im. Ye. I. Martsinovskiy, Ministry of Health SSSR, Moscow (Institut meditsinskoy parazitologii i tropicheskoy meditsiny Ministerstva zdravookhraneniya SSSR)

TITLE: Olfactometer Ø-21 for comparative tests on repellents

SOURCE: Meditsinskaya parazitologiya i parazitarnyye bolezni, v. 35, no. 1, 1966, 69-73

TOPIC TAGS: entomology, insect control, olfaction, olfactometer/Ø-21 olfactometer

ABSTRACT: An olfactometer was designed for testing insect repellents and attractants which is superior to those based on the two-choice principle, because a large number of substances can be tested simultaneously. A number of traps into which the substances tested are placed is attached to a central chamber containing the insects. The air in the central chamber is ventilated to prevent mixing of the substances tested. The insects are made to fly into the traps, the entrances to which are opened simultaneously, by exciting them by means of carbon dioxide and by utilizing the tendency of insects to fly towards light. Counting of the insects in the individual traps and comparison of the results obtained with those for a standard repellent (dimethyl phthalate) and a control trap not containing any chemical made it possible to compare in an effective manner the activity of chemical repellents in tests on mosquitoes, midges, and horseflies. Orig. art. has: 2 figures. [JPRS: 36,932]

SUB CODE: 06 / SUBM DATE: 22Jan64 / ORIG REF: 001 / OTH REF: 006

Card 1/1 UDC: 615.777/.779-014.3

0917 2682

POTAPOV, A.G.

New repair methods and longer periods between repairs. Koks i khim. no.1:60-64 '56. (MLRA 9:5)

1. Ukrglavkoks.
(Coke industry--Equipment and supplies)

68-10-14/22

AUTHORS: Mamon, L.I.(Cand.Tech.Sc.), Potapov, A.G. and Petrunin, G.P.

TITLE: Packing of Rotating Shafts of Centrifugal Pumps for By-Product Departments of Coke Oven Works (Uplotneniye vrashchayushchikhsya valov tsentrobezhnykh nasosov khimicheskikh tsekhov koksokhimicheskikh zavodov)

PERIODICAL: Koks i Khimiya, 1957, Nr 10, pp.53-55 (USSR)

ABSTRACT: A new type of packing for shafts of centrifugal pumps operating in ammonia sulphate plants is proposed. The seal is obtained on working surfaces of rotating and stationary collars and not on the cylindrical surface of the shaft as in the usual design (Fig.2). There are 3 figures.

ASSOCIATION: Dnepropetrovsk Inter-Regional Party School. (Dnepropetrovskaya Mezhoblastnaya Partiynaya Shkola), Dnepropetrovsk Institute of Chemical Technology (Dnepropetrovskiy khimiko-tekhnologicheskiy institut)

AVAILABLE: Library of Congress.

Card 1/1

TAYTS, Ye.M., doktor tekhn. nauk; SHVARTS, S.A., kand. tekhn. nauk[deceased]; PEYSAKHZON, I.B., inzh.; GEL'FER, M.L., inzh.; DMITRIYENKO, M.T., inzh.; DORFMAN, G.A., inzh.; IZRAELIT, Ye.M., inzh.; KULAKOV, N.K., inzh.; KUSHLYANSKIY, B.S., inzh.; MEYKSON, L.V., inzh.[deceased]; LEONOV, A.S., inzh.; SHVARTS, G.A., inzh.; SHVARTSMAN, I.Ya., inzh.; YATSENKO, N.Ya., inzh.; BABIN, P.P., inzh.; KHANIN, I.M., doktor tekhn. nauk, prof., red.; KOZYREV, V.P., inzh., red., KUPENMAN, P.I., inzh., red.; LGALOV, K.I., inzh., red.; LEYTES, V.A., inzh., red.; LERNER, B.Z., inzh., red.; POTAPOV, A.G., inzh., red.; SHELKOV, A.K., red.

[By-product coke industry worker's handbook in six volumes] Spravochnik koksokhimika v shesti tomakh. Moskva, Metallurgiia. Vol.2. 1965. 288 p. (MIRA 18:8)

68-58-6-13/21

AUTHOR: Potapov, A. G.

TITLE: Centralisation of Repairs of Equipment on Coke Oven Works (Tsentralizatsiya remontov oborudovaniya na koksokhimicheskikh zavodakh)

PERIODICAL: Koks i Khimiya, 1958, Nr 6, pp 52-53 (USSR)

ABSTRACT: Arguments for the centralised system of repairs of equipment on coke oven works are given. As an example of improvements obtained by the operation of this system the Bagley coke oven works are quoted. The whole paper is written in general terms, no definite figures to support the thesis are given. There is one table.

ASSOCIATION: Koksokhimteplomontazh

1. Ovens--Maintenance 2. Industrial plants--Maintenance

Card 1/1

L 18465-63 EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pf-4 JD/HW
ACCESSION NR: AR3006448 S/0124/63/000/008/V032/V032

64

SOURCE: RZh. Mekhanika, Abs. 8V250

AUTHOR: Trubin, V. N.; Potapov, A. I.

TITLE: Strain and mechanical properties of metal during the forging of large ingots

CITED SOURCE: Tr. N.-i. i proyektno-konstrukt. in-ta gorn. i obogatit. mashinostr. sb. 2, 1960(1961), 69-80

TOPIC TAGS: ingot , strain, forging, steel, deformation, mechanical property, lead, simulation, joint

TRANSLATION: Results of the experimental study of the effect of the size of the plastic deformation occurring, during the forging of ingots, on the mechanical properties of the metal are given. The experiments were conducted on ingots of steel 40 and steel 34KhN1M. The distribution of deformation with respect to the cross section of the ingot was studied by the method of simulation, by indirect deformation of joined lead samples having in the coordinate lattice in the joining plane. Practical recommendations are given for choice of the degree of deformation

Card 1/2

L 18465-63
ACCESSION NR: AR3006448

of the ingot during forging for improvement of its mechanical properties. E. M. Tret'yakov

DATE ACQ: 28Aug63 SUB CODE: ML, AP ENCL: 00

Card 2/2

DONSKOY, S.M.; ZEMSKOV, N.Ya.; OSENOV, V.I.; POTAPOV, A.I.; UDALIKHINA, A.S.; YAROSHUK, D.Ya.; VAYNER, M.S.; VERNYI, Ye.A.; CHURKIN, D.I.; GERASIMOV, K.A.; ZIBRIN, D.A.; AYKHENVAL'D, Ye.L.; KOZLOV, A.I.; BULANOV, A.G.; OSTROVSKAYA, L.N.; TAUBES, I.S.; PETROV, Z.I.; POTEPALOV, V.A.; PECHONYY, A.D.; TROFIMOVA, A.S., tekhn. red.

[Development of power engineering in the Tatar A.S.S.R.] Razvitie energetiki Tatarskoi ASSR. Kazan', Tatarkoe knizhnoe izd-vo, 1961. 145 p. (MIRA 15:2)

1. Tatar A.S.S.R. Sovet Narodnogo khozyaystva. Upravleniye energeticheskoy promyshlennosti.
(Tatar A.S.S.R.--Power engineering)

POTAPOV, A.I., inzh.

Increase in the accuracy of finite control processes. Izv. vys. ucheb. zav.; energ. 6 no.6:84-89 Je '63. (MIRA 16:11)

1. Leningradskiy korablestroitel'nyy institut. Predstavlena kafedroy avtomaticheskogo regulirovaniya i teplotekhnicheskikh izmereniy.

POTAPOV, A.I., gornyy inzh.; USIK, I.N., gornyy inzh.

Practive fo crushing rocks in blasting paired benches in the mine of the Southern Mining and Ore Dressing Combine. Vzryv. delo no.53/10:156-163 '63. (MIRA 16:8)

1. Yuzhnyy gornoobogatitel'nyy kombinat.
(Krivoy Rog Basin—Strip mining)
(Blasting)

POTAPOV, A.I.; USIK, I.N.

New technology of dressing drill bits. Gor. zhur. no.1:35-36 Ja '64. (MIRA 17:3)

1. Yuzhnyy gornoobogatitel'nyy kombinat, Krivoy Rog.

KHRUSHCHEV, N.S.; PODGORNYY, N.V.; ZASYAD'KO, A.F.; RUDAKOV, A.P.; KAZANETS, I.P.; SHILIN, A.A.; MEL'NIKOV, N.V.; BURMISTROV, A.A.; SHEVCHENKO, V.V.; MAYAKOV, L.I.; ROZENKO, P.A.; KUZ'MICH, A.S.; ZADEMIDKO, A.N.; BRATCHENKO, B.F.; STRUYEV, A.I.; KRASNIKOVSKIY, G.V.; BOYKO, A.A.; KAGAN, F.Ya.; USKOV, A.A.; VLADYCHENKO, I.M.; TOPCHIYEV, A.V.; DEGTYAREV, V.I.; KHUDOSOVTSEV, N.M.; GRAFOV, L.Ye.; IVANOV, V.A.; KRATENKO, I.M.; GOLUB, A.D.; IVONIN, I.P.; SAVCHENKO, A.A.; ROZHCHENKO, Ye.N.; CHERNEGOV, A.S.; MARKELOV, M.N.; LALAYANTS, A.M.; GAPONENKO, F.T.; POLUEKTOV, I.A.; SKLYAR, D.S.; PONOMARENKO, N.F.; POTAPOV, A.I.; POLYAKOV, N.V.; SUBBOTIN, A.A.; POLSTYANOY, G.N.; TRUKHIN, P.M.; TKACHENKO, A.G.; OSTROVSKIY, S.B.; NYRTSEV, M.P.; DYADYK, I.I.; SHPAN'KO, T.P.; RUBCHENKO, V.P.

Kondrat Ivanovich Pochenkov; obituary. Sov. shakht. 11 no.9: 48 S '62. (MIRA 15:9)

(Pochenkov, Kondrat Ivanovich, 1905-1962)

L 14967-63 S/0143/63/000/006/0084/0089

ACCESSION NR: AP3003645 44

AUTHOR: Potapov, A. I. (Engineer)

TITLE: More accurate calculation of final processes of regulation

SOURCE: IVUZ. Energetika, No. 6, 1963, 84-89

TOPIC TAGS: regulation

ABSTRACT: Representation of transients (in evaluating the dynamic properties of a regualtion system) by nonlinear equations with variable coefficients involves much work in their solution. Hence, linearized equations with constant coefficients are conventionally used with subsequent dropping of all higher-than-the-first-power terms in the Taylor's series. This technique, however, may sometimes result in serious errors, as illustrated in the article by transient curves describing the conditions in a 300-kw gas-turbine generator tested at the "Ekonomayzer" plant, see Enclosure 1. The author proposes a special, more accurate linearization by assuming the argument increment in the first power to be variable and all other increments, constant and equal to their static values. Corresponding formulas are developed, and a test calculation for the above generator case (curve 4, Enclosure 1) is made. Orig. art. has: 4 figures and 11 formulas.

ASSOCIATION: Leningrad Ship-Building Institute. Chair of Automatic Regulation and Thermal Measurements

Card 1/1

1961/2

POTAPOV, A.I.

DECEASED
c1961

SEE ILC

AGRICULTURE

YAGUPOV, A.V., kand.tekhn.nauk; POTAPOV, A.I.

Experimental jet piercing of blastholes in mining. Gor. zhur. no. 1:42-45 Ja '61. (MIRA 14:1)

1. Krivorozhskiy filial Instituta gornogo dela AN USSR (for Yagupov). 2. Nachal'nik rudnika Krivorozhskogo yuzhnogo forno-obogatitel'nogo kombinata (for Potapov).
(Boring--Equipment and supplies)
(Strip mining)

KUROCHKIN, [illegible] inzh.; POTAPOV, A.I., tekhnik; DUBININ, P.I., teknik

Watering headings in openpits. Bezop.truda v prom. 4 no.4:28 Ap '60. (MIRA 13:9)

(Krivoy Rog Basin--Mining engineering--Safety measures)

18.3200

77444
SOV/133-60-1-5/30

AUTHORS: Babarykin, N. N., Zborovskiy, A. A., Potapov, A. I. (Engineers), Rabinovich, Ye. I. (Candidate of Technical Sciences)

TITLE: Investigation of Movement of Cast Iron and Slag in the Blast Furnace Hearth

PERIODICAL: Stal', 1960, Nr 1, pp 19-23 (USSR)

ABSTRACT: This is an investigation of physicochemical and mechanical processes taking place in the blast furnace hearth, with the purpose of improving the technological control of the blast furnace process and for the development of reliable methods of control of the hearth and hearth bottom condition. A. A. Agashin, L. K. Strelkov, and A. G. Rogovoy (Engineers) participated in the work. The tests were conducted in 1958 on a 1,371 m^3 blast furnace with 16 tuyeres, a hearth 8 m in diameter, producing the low-manganese conversion cast iron from a charge containing 93% of fluxed sinter. The radioactive isotopes P^{32} and Fe^{59}, of 150-200 and 50-60

Card 1/7

microcurie respectively (in steel ampules) were used. The radiation sources were introduced through an iron tube into the oxidizing zone of tuyeres Nr 2, 5, and 8 (through the inspection hole), 15, 60, and 120 minutes after the closing of cast iron notch. The metal was tapped every 3 hours. The duration of tapping was 35 to 45 minutes. The investigation was based on the assumption that (in the presence of substantial convective flows of cast iron and slag) the radioactive indicator introduced into the hearth should distribute relatively uniformly, over the entire volume of metal.

Therefore, in the course of tapping no essential variations of composition of cast iron or slag should be expected. The radioactivity of samples was measured by a block of eight counters connected with an installation of B-2 type (Ref. 4: V. Ye. Iudin, M. L. Sazonov, and A. I. Osipov, Zavodskaya laboratoriya, 1955, Nr 11). An 11 m^3 ladle was used. The change in radioactivity of cast iron after the introduction of radioactive indicator into the 8th tuyere is given in Fig. 1.

Investigation of Movement of Cast Iron and Slag in the Blast Furnace Hearth

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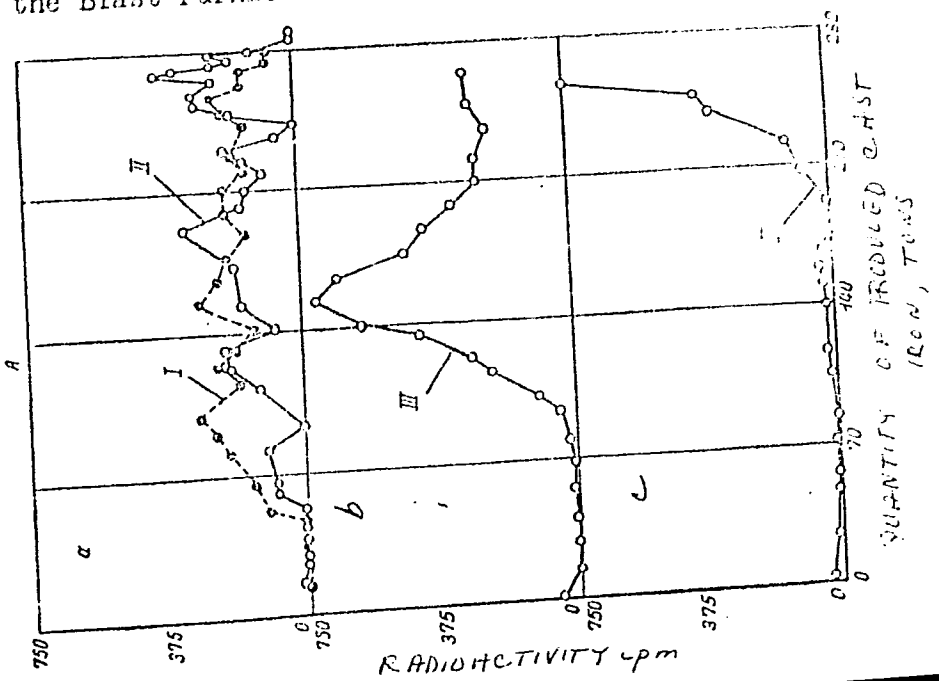

Card 3/7

Investigation of Movement of Cast Iron and Slag in the Blast Furnace Hearth

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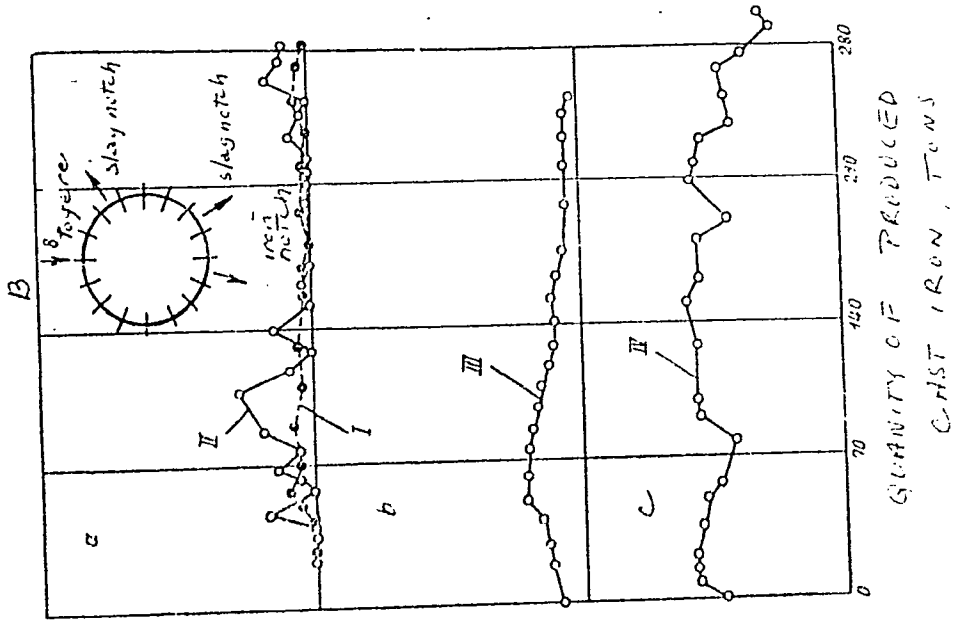
SOV/133-60-1-5/30



Card 4/7

Fig. 1. Change in radioactivity of cast iron at first (A) and second (B) tapping after the introduction of radioactive indicator through the 8th tuyere. (a) Fe^{59} was introduced 15 minutes after closing of tap hole (curves I and II); (b) P^{32} was introduced 1 hour after closing of tap hole (curve III); (c) Fe^{59} was introduced 2 hours after closing of tap hole (curve IV).

Caption for Fig. 1, shown on Cards 3/7 and 4/7.

Similar curves are given for the tests when the radioactive indicator was introduced to the 5th and 2nd tuyeres. The change of temperature of upper slag; the change of basicity of upper and lower slag; the change of temperature of case iron during tapping; and the change of sulfur content in upper and lower slag were recorded. The change of chemical composition of cast iron during tapping is given in Fig. 7. The authors arrived at the following conclusions. The data of

Investigation of Movement of Cast Iron and Slag in the Blast Furnace Hearth

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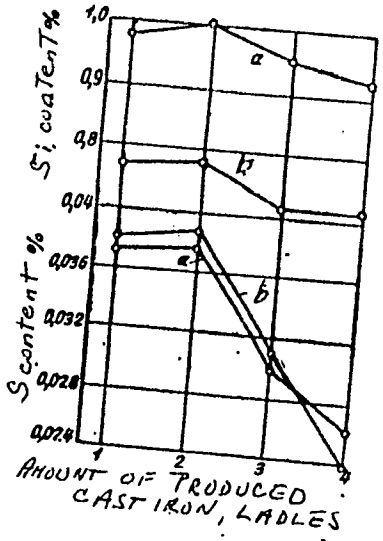
SOV/133-60-1-5/30



Card 6/7

Fig. 7. Change in chemical composition of cast iron during tapping according to experiments: (a) February 1959; (b) September 1957.

KANTOR, S.A., doktor tekhn.nauk, prof.; ORLOV, K.V., kand.tekhn.nauk;
POTAPOV, A.I., inzh.

Testing of a control system taking into account additional load impulses. Izv. vys. ucheb. zav.; energ. 6 no.10:61-67 O '63. (MIRA 16:12)

1. Leningradskiy politekhnicheskiy institut imeni M.I.Kalinina. Predstavlena kafedroy turbinostroyeniya.

88678

12 9100

S/127/60/000/001/002/005
B012/B058

AUTHORS: Oksanich, I. F. and Potapov, A. I.

TITLE: Drilling and blasting in the open-work mining of the Yuzhnyy gorno-obogatitel'nyy kombinat (Southern Mining and Concentration Combine)

PERIODICAL: Gornyy zhurnal, no. 1, 1960, 53-58

TEXT: The rocks of Krivoy Rog have a hardness of from 12 to 18 (according to Protod'yakonov). The average service life of the drill chisels in the open-work mining of the Southern Mining and Concentration Combine only amounts to one twelfth of those used at the Magnitogorskiy rudnik (Magnitogorsk Mine). In open-work mining, the drill rig 6C-1 (BS-1) alone is used at present, with 52 to 76 kw motors, the bore rods weighing 2800 kg at a maximum length of 12 m. The semihoof-shaped chisel head, 260 mm in diameter and with a face angle of 120° proved to be the most suitable shape. This type alone is used at present. The screw joints are the weakest part of the bore rods. Fig. 1 shows an improved screw joint for bore rods of up to 3000 kg proposed by the workers of the buro-vzryvnoy

Card 1/4

Drilling and blasting in the...

tsekh YuGOK (Drilling- and Blasting Section of the YuGOK). It proved reliable under most difficult working conditions. All drill rigs have now been provided with these screw joints. New working standards were introduced in 1958 and the wages directly depend on the bored volume of the drill hole. Blasting experiments showed that the network of drill holes can be increased up to a coefficient of drill hole approach equal to unity, without deteriorating the ignition quality. The analysis of 182 blastings showed that the best effect is obtained at a drill hole approach coefficient of from 0.8 to 0.85 and a drill hole diameter of from 280 to 300 mm. It was ascertained experimentally that the new line of drill holes should be arranged at a distance $W_2 = W_1 + (0.5 - 1.5)$ m from the previously blasted line. Comprehensive experiments during 1958 and 1959 showed the high efficiency of short-delay blasting in the blasting of drill holes in open-work mining (see paper by D. I. Malyuta and others in the same edition of the periodical). It is pointed out that cable-tool drilling does not make it possible to increase the drilling output considerably. Thermal drilling and cutter drilling are described as being especially promising. It is recommended to produce quickly simplest

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88678

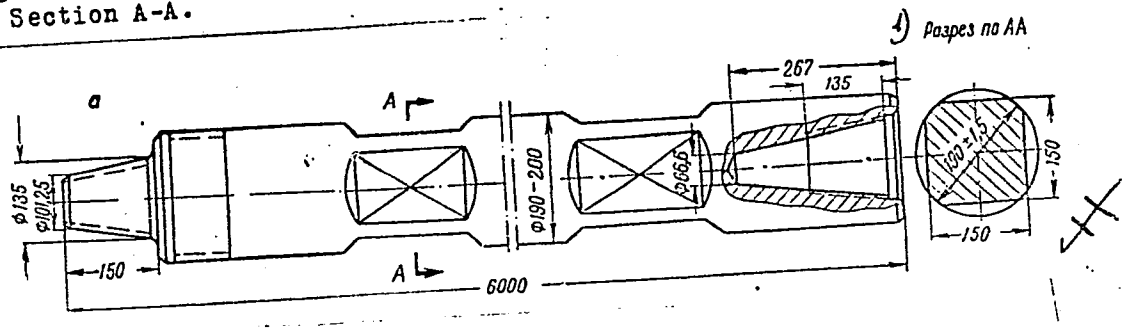
S/127/60/000/001/002/005
B012/B058

Drilling and blasting in the...

retarders for the fuse with various retardation intervals of from 10 to 100 msec. There are 4 figures and 3 tables.

ASSOCIATION: Yuzhnyy gorno-obogatitel'nyy kombinat (Southern Mining and Concentration Combine)

Legend to Fig.1: Bore rod (a) and chisel (b) with hardened screw joint.
1) Section A-A.



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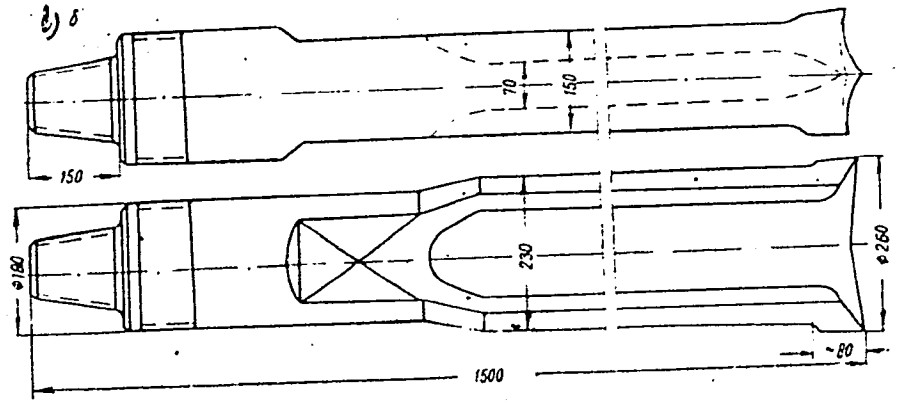
B012/B058

Drilling and blasting in the...



(Fig. 1)
Рис. 1. Штанга (*а*) и долото (*б*) с упрочненным резьбовым замком

Card 4/4

POTAPOV, A.I., gornyy inzh.

World record in development mining. Ugol' 34 no.3:13-19 Mr '59. (MIRA 12:5)

1. Nachal'nik shakhty No.66 tresta Kalininugol' kombinata Tulaugol', Tul'skiy ekonomicheskiy rayon.
(Tula Basin--Coal mines and mining)

U

ALEKSEYEV, F.K.; ANDRIYUTS, G.L.; ARSENT'YEV, A.I.; ASTAF'YEV, Yu.P.; BEVZ, N.D.; BEREZOVSKIY, A.I.; GENERALOV, G.S.; DOROSHENKO, V.I.; YESHCHENKO, A.A.; ZAPARA, S.A.; KALINICHENKO, V.F.; KARNAUSHENKO, I.K.; KIKOVKA, Ye.I.; KOBOZEV, V.N.; KUPIN, V.Ye.; LOTOUS, V.K.; LYAKHOV, N.I.; MALYUTA, D.I.; METS, Yu.S.; OVODENKO, B.K.; OKSANICH, I.F.; PANOV, V.A.; POVZNER, Z.B.; PODORVANOV, A.Z.; POLISHCHUK, A.K.; POLYAKOV, V.G.; POTAPOV, A.I.; SAVITSKIY, I.I.; SERBIN, V.I.; SERGEYEV, N.N.; SOVETOV, G.A.; STATKEVICH, A.A.; TERESHCHENKO, A.A.; TITOV, D.S.; FEDIN, A.F.; KHOMYAKOV, N.P.; SHEYKO, V.G.; SHEKUN, O.G.; SESTAKOV, M.M.; SHTAN'KO, V.I.

Practice of construction and exploitation of open pits of Krivoy Rog Basin mining and ore dressing combines. Gor. zhur. no.6: 8-56 Je '63. (MIRA 16:7)

(Krivoy Rog Basin--Strip mining)

POTAPOV, A.I.

Results of testing a double-impulse control system of marine gas turbine generators. Sudostroenie no.8:34-36 Ag '65. (MIRA 18:9)

ACCESSION NR: AR5001390 S/0285/64/000/010/0020/0020

SOURCE: Ref. zh. Turbostroyeniye. Otdel'nyy vypusk, Abs. 10.49.101

AUTHOR: Potapov, A. I.

B

TITLE: The effect of a regenerator on the dynamic properties of a single shaft gas turbogenerator

CITED SOURCE: Tr. Leningr. korablestroit. in-ta, vyp. 42, 1964, 193-199

TOPIC TAGS: marine gas turbogenerator, regenerator effect, regulation system efficiency, transitional efficiency, attenuating speed pulse, attenuating load pulse

TRANSLATION: The deterioration of efficiency during transition from one level of operation to another at an instantaneous change in load, occurring when a regenerator is employed, comprises one of the reasons for its rejection in designs of marine gas turbine electric generators. A formula for the maximal relative rpm excess (δ_{dyn}) at total load removal

$$\delta_{dyn} = \frac{\delta_{st}}{1 - \rho(1 - m_T \beta_T)},$$

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ACCESSION NR: AR5001390

was evolved for the purpose of evaluating the dynamic properties of electric generators employing a regulatory system with a speed pulse. Here, δ_{st} is the static irregularity of regulation, ρ is the level of regeneration, and m_T is the dimensionless isentropic expansion energy in the turbine. An increase in ρ leads to higher values of δ_{dyn}. The inclusion of R also affects the stability of plant operation, which governs the minimum possible level of irregularity. It is demonstrated that the stability of electric generators with regenerators is greater than that of those without them and that a plant with a regenerator can operate steadily at a lower δ_{st}. A simple reduction in δ_{st} does not insure satisfactory regulatory transitions in electric generators with regenerators because of the greater duration of the process (resulting from thermal capacity of the metal in the regenerator). Attenuating load and speed pulses should be incorporated in designs to reduce the rpm excess levels. A regulation system of such a type was tested on a 300 kw electric generator produced at the "Ekonomayzer" factory. The system is described and experimental curves are illustrated. Bibl. with 9 titles; 4 illustrations. N. Troitskiy

ENCL: 00

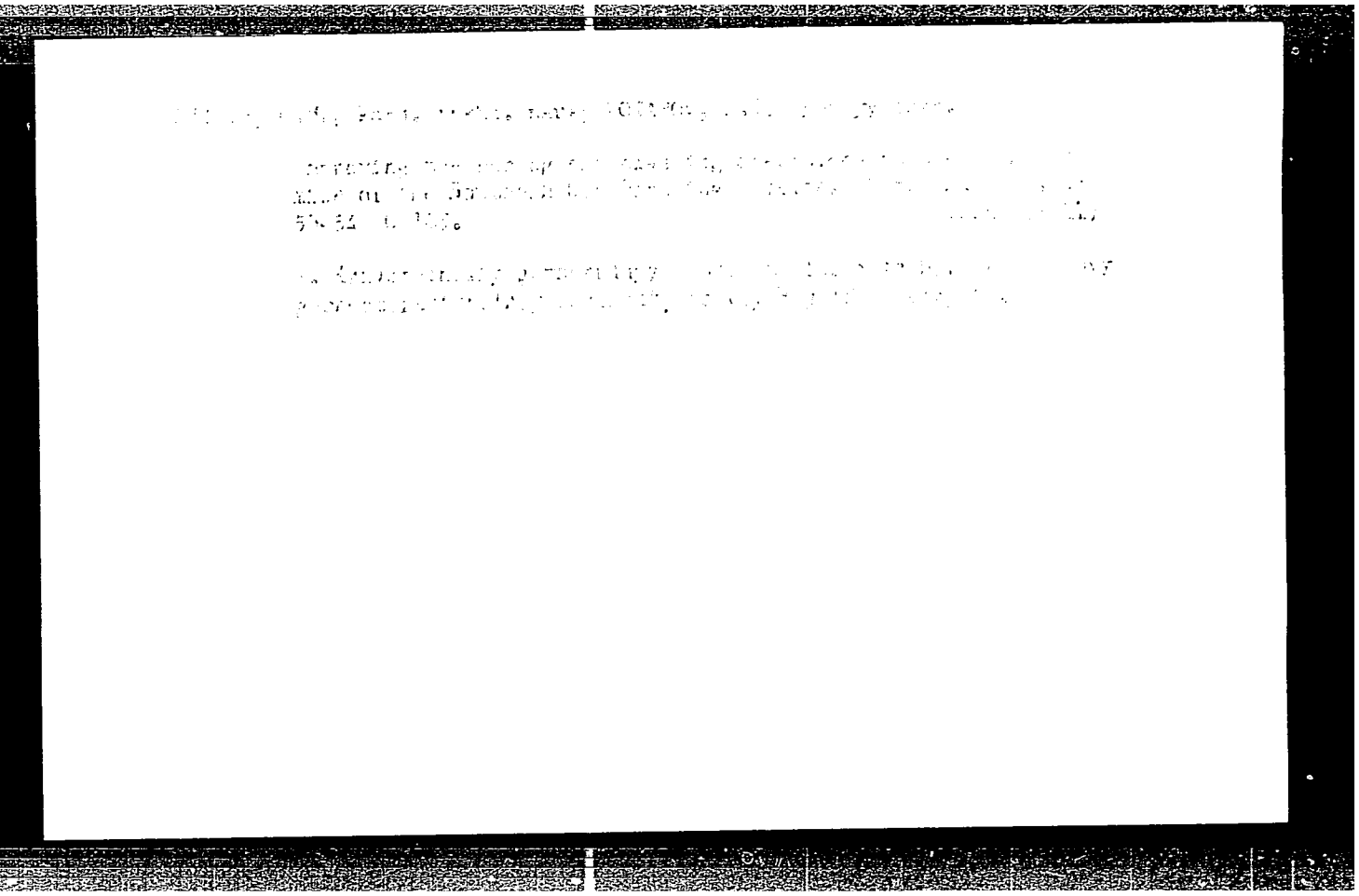
SUB CODE: PR

Card 2/2

POTAPOV, A.L.

Using the magazine "Ogonek." Geog. v shkole 22 no.1:58-60 Ja-F '59. (MIRA 12:4)

1. Lyubinskaya shkola Omskoy oblasti.
(Geography--Study and teaching)



RUSANOV, V.T.; GUR'YEV, I.D., master; KOCHENKOV, V.V., osmotrshchik-avtomatchik; SUKINOV, S.I., osmotrshchik-avtomatchik; SEMENIKHIN, N.A., osmotrshchik-prolazchik; MALYGINA, N.A., slesar'-avtomatchik; MAMTAK, A.I., inzh.-tekhnolog; MALOV, G.A., instruktor; POTAPOV, A.L., mashinist elektrovoza; KOVRIZHKIN, N.P.; PATEYUK, I.L., starshiy inzh. po tormozam

Discussion of Boiko and Senderov's article "Is there a need for emergency braking boosters on freight trains?" Elek.i tepl. tiaga 5 no.12:26-27 D '61. (MIRA 15:1)

1. Punkt tekhnicheskogo osmotra stantsii Magnitogorsk Yuzhno-Ural'skoy dorogi. 2. Nachal'nik punkta tekhnicheskogo osmotra stantsii Magnitogorsk Yuzhno-Ural'skoy dorogi (for Rusanov). 3. Depo Tuapse Severo-Kavkazskoy dorogi (for Potapov). 4. Starshiy revizor sluzhby lokomotivnogo khozyaystva Moskovskoy dorogi (for Kovrizhkin). 5. Sluzhba vagonnogo khozyaystva Moskovskoy dorogi (for Pateyuk). (Railroads--Brakes)

L 39080-66 EWT(m)/EWP(j)/T IJP(c)

ACC NR: AP6021975 SOURCE CODE: UR/0153/66/009/002/0322/0324

AUTHOR: Gridunov, I. T.; Sergeyev, A. S.; Koshelev, F. F.; Potapov, A. M.; Puzrin, B. S.

ORG: Rubber Technology Department, Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov (Kafedra tekhnologii reziny, Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: On the evaluation of the incombustibility of rubbers

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 9, no. 2, 1966, 322-324

TOPIC TAGS: combustion, rubber

ABSTRACT: The incombustibility of several rubber compositions was evaluated by studying the dependence of the combustibility (in terms of the extinction time in seconds) on the time during which the specimen remained in the flame. The five compositions studied were: (1) composition A (pts. by wt.): nairit, 100; MgO 10; ZnO, 5; chlorinated paraffin, 5.5; chalk, 5; (2) composition B = composition A + 5.0 pts. by wt. of aluminum hydroxide; (3) composition C = composition A + 20 pts. by wt. of aluminum hydroxide; (4) composition D = composition A + 40 pts. by wt. of aluminum hydroxide; (5) composition E = composition A + 40 pts. by wt. of nickel sulfate crystal hydrate. The corresponding curves are shown in Fig. 1. On each curve,

Card 1/2 UDC: 678.014

ACCESSION NR: AR4041526 S/0271/64/000/005/A052/A052

SOURCE: Ref. zh. Avtomatika, telemekhanika i vy*chislitel'naya tekhnika. Svodny*y tom, Abs. 5A293

AUTHOR: Potapov, A. M.

TITLE: Calculation of circuits of two-channel transmission of signals in powered tracking gear

CITED SOURCE: Sb. tr. Leningr. mekhan. in-ta, no. 33, 1963, 60-73

TOPIC TAGS: tracking gear, signal transmission circuit, circuit

TRANSLATION: Variants are considered of circuits of transmission of signals with blanking circuit, and calculation is made of their parameters. Circuits of similar type ensure higher linearity of output signal. Circuits are based on summation of signals (voltages) from transducers of exact and rough readings. Circuits ensure operation of tracking gear at small angles of mismatch (up to

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ACCESSION NR: AR4041526

90 to 130°) from transducer of exact reading. With large angles of mismatch it is possible to switch from exact reading to rough. The indicated circuits were used in actual tracking gear and were checked at frequencies of 50 and 400 cps. Eight illustrations, Bibliography: 5 references.

SUB CODE: DC, EC ENCL: 00

Card 2/2

L 33442-66 EWT(d)/EWP(1) IJP(c) BC

ACC NR: AR6014179 SOURCE CODE: UR/0271/65/000/011/A010/A010

AUTHOR: Potapov, A. M.

TITLE: Calculation of nonlinear servodrives by the method of typical equations and harmonic linearization

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 11A71

REF SOURCE: Sb. tr. Lening ekhan. in-ta, no. 41, 1964, 80-95

TOPIC TAGS: servosystem, s omechanism

ABSTRACT: A method of typical equations and a transformation of a typical characteristic equation for nonlinear servodrives are described. Some methods for determining stable equilibrium regions and periodic solutions of the characteristic equations are considered. Examples are given of application of this method to designing specific servodrives that possess one arbitrary harmonic linearizable nonlinearity. The method permits: (a) establishing simple criteria for investigating the stability of free oscillations in nonlinear systems; (b) evaluating the effect of practically any harmonically linearizable nonlinearity on the servo operation; (c) solving the problem of synthesis of nonlinear servodrives; (d) investigating the effect of various parameters on the stability of nonlinear systems; (e) determining the parameters of periodic solutions; (f) ensuring the required conditions in a self-oscillatory system. The above method is simple and universal. Four figures. Bibliography of 6 titles. V. M. [Translation of abstract]

Card 1/1 SUB CODE: 13, 09 UDC: 62-501.3

ACC NR: AT6036473 SOURCE CODE: UR/0000/66/000/000/0020/0021

AUTHOR: Aleksandryuk, S. P.; Anisimov, B. V.; Komarov, N. N.; Nefedov, Yu. G.; Potapov, A. N.; Serova, L. V.; Tikhonova, G. P.

ORG: none

TITLE: Air ionization as a spaceflight factor [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 20-21

TOPIC TAGS: aeroionization, closed ecological system, life support system, human physiology, aeroion biologic effect, cosmic radiation biologic effect

ABSTRACT:
The physical and chemical properties of space cabin atmospheres may be changed by cosmic radiation, which produces ions and dissociated molecules with high (10 to 15 ev) potential energies. The latter have considerable chemical activity. A study was therefore made of the ionization of space cabin air. Radiation equivalent in intensity to average galactic radiation (0.3 ber) produces an atmospheric ion concentration of 10^5 mol/cm^3, which is easily reproduced under laboratory conditions.

Card 1/2

POTAPOV, A.N.

Electrophysiological study of the consequences of ventral hemisection of the spinal cord in cats. Fiziol. zhur. 49 no.11: 1353-1359 N '63. (MIRA 17:8)

1. Institut vysshey nervnoy deyatel'nosti i neyrofiziologii AN SSSR, Moskva.

[illegible], [illegible] V. [illegible], [illegible] Eng.

Hydraulic Engineering TSimlyansk

Hydromechanization at the TSimlyansk hydro-development. Mekh. trud. [illegible], [illegible], 195[illegible].

9. Monthly List of Russian Accessions, Library of Congress, October 1953, Uncl.
2

COUNTRY : [illegible]
CATEGORY : [illegible]
Insect and Mite Pests.

ABS. JOUR. : Ref Zhur -Biologiya, No. 4, 1959, No. 15775

AUTHOR : Potapov, A.N.
INST. :
TITLE : Aerosols to Combat the Grain [illegible]

ORIG. PUB.: Zashchita rast. ot vredit. i bolezney, 1958, No.2, 59

ABSTRACT The flying period of the butterflies extended from June [illegible] - July 15th, and massive flying occurred on the 2nd and 3rd of July. The wheat was treated from July 6th at night (from 8 - 9 in the evening until 3 - 4 in the morning) with the aerosol device AG-L6 or [illegible] sol- tion in diesel oil. 5 - 5.5 % [illegible]. [illegible] [illegible] of 60 - [illegible] [illegible] hectare were treated at a cost of [illegible] rubles per hectare (0.4 - 0.5 [illegible]

CARD: 1/2

POTAPOV, A. N.

"Mechanize the Loading of Planes With Poisonous Chemicals," by A. N. Potapov, agronomist, Alma-Ata, Zashchita Rasteniy ot Vrediteley i Bolezney, Moscow, Vol 1, No 5, Nov/Dec 56, p 27

The author criticizes the fact that no steps have yet been taken to mechanize the work of the loading of planes with poisonous chemicals, although planes have been used in Soviet agriculture to disseminate such chemicals over fields since 1922. Hand loading requires a large labor force. Furthermore, hand loading is especially harmful to the workers, since no steps have yet been taken to protect the workers from the effects of the poisons. Thus, the coveralls which the workers wear are prepared from materials through which the powdery poisons easily pass. The goggles now in use are not properly fitted and their lenses are easily lost. The respirators are heavy and of poor quality. Their filters become rapidly clogged with dust, making breathing difficult. Respirators should be made of lightweight materials; they should be well-fitted to the face, and their filters must protect the workers from the poisons.

The mechanical equipment for the loading of the planes with the poisonous chemicals must be lightweight, easily assembled and disassembled, and easily transportable. It should require a minimum of labor power for its utilization.

In a footnote to Potapov's article, the editor of the periodical Zashchita Rasteniy ot Vrediteley i Bolezney supports the author's demand for the mechanization of the work of loading of planes with chemicals. He cites a letter received from Sushko, chief of the Samarkand Oblast Unit for the Control of Pests, who writes that three types of planes are now in use in the oblast for agricultural purposes: AN-2, YaK-12, and PO-2. These planes are not supplied with gangways or mechanical facilities for loading. The result is a waste of labor power and poor plane productivity.

This is an intolerable situation, the editor concludes, and steps must be taken to correct it.

Sum 1219

POTAPOV, A.N.

Using aerosols in the control of the cutworm Hadena basilinea.
Zashch.rast.ot vred. i bol. 3 no.2:59 Mr-Ap '58. (MIRA 11:4)

1. Glavnyy agronom po zashchite rasteniy Ministerstva sel'skogo khozyaystva KazSSR.
(Aerosols) (Cutworms)

NAUMOVICH, N.Ye., agronom-entomolog; ARKHANGEL'SKIY, Pav. P., agronom-entomolog; MAL'KOVSKIY, N.P., agronom-entomolog; POTAPOV, A.N., agronom-entomolog

Plant Protection Service of Kazakhstan needs to be improved.
Zashch.rast.ot vred. i bol. 3 no.6:26-27 N-D '58. (MIRA 11:12)
(Kazakhstan--Plants, Protection of)

YAVORSKIY, Vasiliy Nikolayevich; BESSONOV, Aleksandr Andreyevich; KOROTAYEV, Aleksey Ivanovich; POTAPOV, Anatoliy Mikhaylovich; KHRUSTALEVA, N.I., red.; GOROKHOVA, S.S., tekhn. red.

[Design of invariant servo system drives] Proektirovanie invariantnykh slediashchikh privodov. [By] V.N.IAvorskii i dr. Moskva, Vysshaia shkola, 1963. 474 p. (MIRA 17:3)

L 50934-65 EWT(l)/EPA(s)-2/EWT(m)/EWP(i)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) Pt-7/Pl-4
IJP(c) JD/GG

ACCESSION NR: AP5011464 UR/0048/65/029/004/0706/0710

AUTHOR: Shur, Ya. S.; Glazer, A. A.; Tagirov, R. I.; Potapov, A. P.

TITLE: Concerning the nature of uniaxial anisotropy of thin ferromagnetic films /Report, Second All-Union Symposium on Thin Ferromagnetic Films held in Irkutsk 10-15 July 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 4, 1965, 706-710

TOPIC TAGS: ferromagnetic thin film, magnetic anisotropy, permalloy

ABSTRACT: While it is a familiar fact that thin ferromagnetic films prepared by vacuum evaporation onto substrates in a magnetic field exhibit uniaxial anisotropy, the nature and origin of this anisitropy are still obscure. Accordingly, the aim of the present work was to identify the possible reason for appearance of uniaxial anisotropy on the basis of investigation of some of the pertinent properties of Permalloy films. The results of a series of experiments showed that uniaxial anisotropy of Permalloy films, at any rate, is not connected with so-called "oriented superstructure". Note is made of the singular characteristics of the hysteresis loops of Permalloy films and the fact that the relative residual magnetization of films differs from that of bulk specimens. The effect of annealing at different

Card 1/2

L 50984-65

ACCESSION NR: AP5011464

temperatures on some of the magnetic and electric properties of Permalloy films is discussed (after annealing at 400° 79 Permalloy films become isotropic). It is concluded that the cause of uniaxial anisotropy in thin polycrystalline films is shape (geometric) anisotropy of the single domain grains, separated from each other by less magnetic boundaries. The size of the grains must be small (not over a few hundred Angstroms) so that the grains will be single domain ones and the volume of the intergrain boundries will be commensurate with the volume of the grains. It follows that uniaxial anisotropy need not be restricted to very thin films, but might be evinced even in "bulk" specimens, provided they are composed of sufficiently small grains of elongated shape and arrayed with their longest axes in the same direction. Orig. art. has: 2 figures.

ASSOCIATION: Institut fiziki metallov Akademii nauk SSSR (Institute of Physics of Metals, Academy of Sciences, SSSR)

SUBMITTED: 00 ENCL: 00 SUB CODE: EM, MM

NR REF SOV: 003 OTHER: 005

Card 2/2

SHUR, Ya.S.; GLAZER, A.A.; TAGIROV, R.I.; POPAPOV, A.P.

Nature of the uniaxial anisotropy of thin ferromagnetic films.
Izv. AN SSSR. Ser. fiz. 29 no.4:706-710 Ap '65. (MIRA 18:5)

1. Institut fiziki metallov AN SSSR.

POTAPOV, A. P., Cand Agri Sci — (diss) "Experience of the Lenin kolkhoz in Kirsanovsk rayon, Tambov Oblahst in developing horticulture. Questions of agrotechniques, organization and economics," Michurinsk, 1959, 21 pp, 100 cop. (Fruit and Vegetables Institute im I. V. Michurin) (KL, 45-60, 127)

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Sadovodstvo kolkhoza imeni Lenina, K[illegible]skogo raiona, Tambovskoi oblasti (Fruit raising on the Lenin Collective Farm). Moskva, Sel'khozgiz, 195[illegible]. 32 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 7, Oct. 1954

EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6029155 SOURCE CODE: UR/0048/66/030/006/1059/1061

AUTHOR: Glazer, A.A.; Potapov, A.P.; Tagirov, R.I.

ORG: Institute of Metal Physics, Academy of Sciences, SSSR (Institut fiziki metallov Akademii nauk SSSR)

TITLE: Two-layer films of manganese and Permalloy with unidirectional anisotropy (characteristics of the domain structure) [Report, All-Union Conference on the Physics of Ferro- and Antiferromagnetism held 2-7 July 1965 in Sverdlovsk]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 6, 1966, 1059-1061

TOPIC TAGS: ferromagnetism, antiferromagnetism, ferromagnetic film, permalloy, manganese, magnetic domain structure

ABSTRACT: In order to investigate the influence on domain structure of the exchange interaction between ferromagnetic and antiferromagnetic regions that is responsible for unidirectional anisotropy, the authors have recorded powder patterns of two-layer films of Permalloy and manganese, which, according to O. Massenet and R. Montmory (C.r.Acad. sci., 258, No.6, 1752 (1964)), can be made to exhibit unidirectional anisotropy at room temperature. The films of manganese and 82 Permalloy were successively vacuum deposited at 5×10^{-5} mm Hg to a thickness of 500 Å each onto a glass substrate held at 250° C in a magnetic field of 70 Oe. After deposition the films exhibited uniaxial magnetic anisotropy and a domain structure of the usual type, and magne-

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L 08766-67
ACC NR: AP6029133

tization switching took place by nucleation followed by domain wall displacement. The domain walls exhibited cross-ties, i.e., they consisted of portions with right- and left-hand rotation of the spins in the plane of the film. Unidirectional anisotropy was induced in the films by annealing them for 1.5 hour at 350°, which resulted in the formation of an antiferromagnetic compound at the boundary between the manganese and the Permalloy. The domain walls present in the film during the anneal were clamped, i.e., they could not be moved or destroyed by demagnetization in a decreasing alternating field. Switching took place by magnetization rotation in different directions, as was evinced by the appearance within the domains of walls perpendicular to the applied field. At saturation the positions of the original walls were marked by clusters of powder, and the walls reappeared in their original locations and with their original fine structures when the field was removed. The annealed films required much stronger fields for magnetization switching than did the unannealed ones. The clamping of the domain walls in the annealed films is explained as a result of the exchange interaction between the ferromagnetic and antiferromagnetic layers and the inability of moderately strong external fields to alter direction of the antiferromagnetism in the antiferromagnetic layers. Orig. art. has: 3 figures.

SUB CODE: 20 SUBM DATE: 00 ORIG. REF: 002 OTH REF: 002

Card 2/2 hc

ACC NR: AP6033565 SOURCE CODE: UR/0181/66/008/010/3022/3031

AUTHOR: Glazer, A. A.; Potapov, A. P.; Tagirov, R. I.; Shur, Ya. S.

ORG: Institute of Physics of Metals, AN SSSR, Sverdlovsk (Institut fiziki metallov AN SSSR)

TITLE: Exchange anisotropy in thin magnetic films

SOURCE: Fizika tverdogo tela, v. 8, no. 10, 1966, 3022-3031

TOPIC TAGS: manganese, permalloy, magnetic anisotropy, ferromagnetic film, antiferromagnetic material, magnetic hysteresis, hysteresis loop, metal diffusion

ABSTRACT: The purpose of the investigation was to study systematically the magnetic properties of two-layer manganese-permalloy films and especially to determine the regularities that result from exchange interaction between the ferromagnetic and antiferromagnetic regions in such substances. The samples were produced in the form of round spots of 18 mm dia. by successive sputtering of layers of manganese and 82-permalloy on discs cut from cover classes in a vacuum of 5×10^{-5} mm Hg. The sputtering was in a magnetic field of 70 Oe at a temperature 250C. The layer thickness was 400 - 1500 Å. The film characteristics measured were the hysteresis loops in different directions in the plane of the film, the torque curves, and the domain structure. The measurements were made after annealing at 350C and cooling in the magnetic field. The films so treated exhibit a domain structure and all the attributes characteristic of substances with exchange (unidirectional) anisotropy, namely a shift in

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POTAPOV, A.S., starshiy nauchnyy sotr.; DEDOV, A.G., mladshiy nauchnyy sotr.; USTINOVA, N.A., mladshiy nauchnyy sotr.; GUN, K.K., red.

[Chemical and rubber industry of capitalist countries] Khimicheskaia i rezinovaia promyshlennost' kapitalisticheskikh stran; statisticheskii sbornik. Moskva, Nauchno-issl. in-t tekhniko-ekon. issledovanii, 1960. 205 p. (MIRA 14:10)

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(Weather research)

KOREN'KOV, Georgiy Lukich; POTAPOV, A[illegible]ksandr Sergeyevich; DEDOV, Aleksey Grigor'yevich; KOSTIN, V.P., red.

[Economics of the chemical industry of capitalist countries; a manual] Ekonomika khimicheskoi promyshlennosti kapitalisticheskikh stran; spravochnik. Moskva, Ekonomika, 1965. 351 p. (MIRA 18:7)

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"Care of Cases with Measles," Fel'dsher i Akusher., No. 11, 1949.

POTAPOV, A.T., inzh.

Protective structures of the Dubossary Reservoir. Gidr. stroi. 31 no. 1:21-23 Ja '61. (MIRA 14:3)
(Dubossary Hydroelectric Power Station--Dams)

POTAPOV, A.T., inzh.

Consolidating embankments of the earth dam of the Dubossary Hydroelectric Power Station. Gidr.stroi. 30 no.7:26 J1 '60. (MIRA 13:7)
(Dubossary Hydroelectric Power Station)
(Dams)

CHERNYSHEV, M.P.; ROZHKOV, L.P.; SHUL'GINA, Ye.F.; IGNATOVICH, A.F.; LABUNSKAYA, L.S.; FOMINA, T.V.; CHERNYAKOVA, A.P.; SHPAKOVA, L.N.; TARASOVA, M.K.; ANFILATOVA, A.I.; SLAVIN, L.B.; BARYSHEVSKAYA, G.I.; DERIGLAZOVA, N.V.; MATUSHEVSKIY, G.V.; AL'TMAN, E.N.; KROPACHEV, L.N.; CHEREDILOV, B.F.; POTAPOV, A.T.; DUDCHIK, M.K.; REGENTOVSKIY, V.S.; YERMAKOVA, L.F.; SEMENOVA, Ye.A.; KULIKOVSKIY, I.I.; KIRYUKHIN, V.G.; AKSENOV, A.A., red.; NEDOSHIVINA, T.G., red.; SERGEYEV, A.N., tekhn. red.; BRAYNINA, M.I., tekhn. red.

[Hydrometeorological handbook of the Sea of Azov] Gidrometeorologicheskii spravochnik Azovskogo moria. Pod red. A.A.Aksenova. Leningrad, Gidrometeoizdat, 1962. 855 p. (MIRA 16:7)

1. Gidrometeorologicheskaya observatoriya Chernogo i Azovskogo morey.

(Azov, Sea of--Hydrometeorology)

Potapov, A.T.,

98-7-8/20

AUTHORS: Vuytsitskiy, S., Engineer (Ministry for Electric Power of the Polish Peoples' Republic), and Potapov, A.T., Engineer

TITLE: Dismountable - Prefabricated, Reinforced - Concrete Parts for Cofferdam Construction in Hydroelectric Power Plants in Poland (Sborno-razbornaya zhelezobetonnaya peremychka na stroitel'stve gidrouzla v Pol'she)

PERIODICAL: Gidrotekhnicheskoye Stroitel'stvo, 1957, No 7, pp 33-35 (USSR)

ABSTRACT: In 1956 construction was started at one of the rapids of the San river. The river cuts through formations of sandstone and slate, the bottom of the river was covered with boulders. As a result of the mountainous terrain, the water level was subjected to rapid changes. Since construction of several hydroelectric power plants was contemplated along this river, under identical geological and hydrological conditions, and in close proximity to each other, the re-use of prefabricated parts was planned. The shortage of timber in Poland, as well as the existing geological conditions, demanded the building of a rational type of cofferdam adaptable to these conditions. The necessity of constructing several power

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Dismountable - Prefabricated Reinforced - Concrete Parts for Cofferdam Construction in Hydroelectric Power Plants in Poland

methods was completed before the ice-flow started. The simplicity and speed in erecting the dam, recommends the application of the new system under other similar conditions. The article contains 1 photo, 1 table, and 4 figures.

ASSOCIATION: Ministry for Electric Power of the Polish Peoples' Republic (Ministerstvo energetiki Pol'skoy Narodnoy Respubliki)

AVAILABLE: Library of Congress

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Rejecting the use of drains in the body of concrete dams. Gidr. stroi. 30 no.10:17-19 O '60. (MIRA 13:10)
(Ukraine--Dams)

ISTAKOV, A. V.

"Graphic Methods for Gas Dynamics and Their Application to the Calculation of Scavenging in a Two-Cycle Engine." Thesis for degree of Cand. Technical Sci. Sub 14 Nov 49, Moscow Order of the Labor Red Banner Higher Technical School imeni N. E. Bauman.

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.